

1/2

FIGURE 1

DATA SET 1							DATA SET 2							
General Gene Marker Type	Examples of Gene Types	Gene Marker CYP	Polymorphism	Links with Cancer susceptibility	Links with higher risks of cancer susceptibility	Homozygote or heterozygote relative to wild type	Genetic Susceptibility ranking				Foods and other materials to avoid	Dietary and lifestyle advice		
							Reduce susceptibility	Normal susceptibility	Increases susceptibility	Higher susceptibility			Very High susceptibility	
Type 1	Genes that code for enzymes responsible for the detoxification of xenobiotics in Phase I metabolism													
			Cyp1A1-4 (wild type)	Colonial, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote		YES					Reduce consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Consume food products such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables.
			Op1A1-C	Colonial, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote			YES				Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.
						Heterozygote			YES				Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.
			3a-4a polymorphism	Colonial, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote			YES				Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.
						Heterozygote				YES			Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.
		MAT1											Reduce consumption of pesticides (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Consume food products such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables.
			MAT14 (wild type)			Heterozygote		YES					Reduce consumption of pesticides (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Consume food products such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables.
				Colon cancer		Heterozygote							Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family of vegetables.
			MAT110			Heterozygote							Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family of vegetables.



2/2

Figure 2

